## III. AGRICULTURAL TRENDS IN SALEM COUNTY



"So that if there be any terrestrial Canaan, 'tis surely here where the land floweth with milk and honey." -- attributed to John Fenwick, speaking of Salem circa 1675

Salem County's rich soil has made agriculture the primary land use activity since the County's founding by John Fenwick in 1675. The *Historical Collections of the State of New Jersey* by John W. Barber and Henry Howe noted, "The trade of the County consists of wheat, rye, Indian Corn, oats and vegetables for the Philadelphia market; lumber, wood, clover, timothy, and particularly herdgrass seed, large quantities of which are exported to New England." (*Historical Collections of the State of New Jersey, 1844*)

Salem County's largest single land use continues to be agriculture. Aerial surveys show 42% of the County's land as agricultural. (*N.J. DEP Land Use/Land Cover*) The 2002 Census of Agriculture, found that 42.6% of Salem County's land is under active farmland cultivation. More than 10% of the State's farmland is located in Salem County, and Salem County ranks second behind Burlington County in total number of acres of farmland preserved. The *National Agricultural Statistics Service* 2002 farmland survey identified 753 farms in the County of Salem, covering 96,238 acres.

To maintain the strong agricultural base of the County, Salem has embarked upon an aggressive farmland preservation program. Salem County farmland preservation efforts began in 1990 when the Board of Chosen Freeholders adopted a resolution authorizing the creation of the Agricultural Land Preservation Program. The first farm permanently preserved in Salem County was the Harris Farm in 1990. In 2006 Salem County celebrated the preservation of its 20,000 acre of farmland. Over 14% of New Jersey's preserved farmland is located in Salem County.

The *Agricultural Census of 2002* shows a continued gradual growth in farming activity in Salem County from 1997 to 2002. The number of total farms increased 5% from 716 in 1997 to 753 in 2002. Total land in farm production increased 4% from 92,840 acres to 96,238 acres. Despite a decrease in average farm size, down 2% from 130 acres to 128 acres, the median farm size of 40 acres is still larger than the New Jersey state median farm size of 22 acres (*see table following this section*). The market value of production was \$68,492,000 in 1997 and \$75,520,000 in 2002, an increase of 6%, putting Salem County fifth in the State. In 2002 crop sales accounted for \$55,799,000 of the total and livestock sales accounted for \$16,723,000 of the total.

In 2002 the top crop (in acres planted) was soybeans at 18,240 acres; followed by 14,555 acres in vegetables. Corn for grain accounted for an additional 14,374 acres. The remaining crops were

forage at 11,388 acres and wheat for grain at 7,339 acres. An additional 16,168 acres were used for nursery, greenhouse, floriculture and sod operations. Livestock and poultry operations accounted for 16,723 acres. (*National Agricultural Census of 2002*) An overall summary of Salem County farmland production and history is included in the table at the conclusion of this section of the Plan.

Farm Number and Distribution by Size	
Salem County Farms	Number
Farms (number)	753
Land in farms (acres)	96,238
Land in farms - Average size of farm (acres)	128
Land in farms - Median size of farm (acres)	40
Farms by size - 1 to 9 acres	135
Farms by size - 10 to 49 acres	306
Farms by size - 50 to 179 acres	176
Farms by size - 180 to 499 acres	88
Farms by size - 500 to 999 acres	31
Farms by size - 1,000 acres or more	17
2002 Census of Agriculture	

Salem County's soil is extremely well suited to farming with the major soil type being prime agricultural soil. Given the excellent soil, long growing season, location along the Delaware River across from Wilmington, Delaware and situated approximately 30 miles from Philadelphia and within a few hours of the markets in the metropolitan New York, Baltimore, and Washington, D.C. areas, there are compelling reasons for the predominant land use of Salem County to have remained agricultural.

Salem County has run contrary to the state trend of decreasing cultivated land. The New Jersey Sustainable State Institute (NJSSI) at the Edward J. Bloustein School of Planning and Public Policy, Rutgers University, found that from 1950 to 2000, land in farms in New Jersey dropped by more than one-half from 1.8 million to 0.8 million acres, and the number of farms dropped by about two-thirds from 26,900 to 8,600 farms. Between 1970 and 2000, the average New Jersey farm decreased from 123 acres to 86 acres. During the last five years total acreage in farms throughout the state has leveled off. (Living With the Future in Mind: Goals and Indicators for New Jersey's Quality of Life)<sup>4</sup>

NJSSI found that the decrease in cultivated land in New Jersey correlates to an increase in property values in much of the state. In 1999 the average per-acre value of New Jersey farmland including land and buildings was \$8,370, the highest in the country. This trend has continued into the present. Often the returns from farming are not enough to allow farmers to save for college or retirement. They rely, therefore, on being able to borrow against or sell their land for

higher-value development when their children are ready for college or they wish to retire.

A Bureau of Economic Analysis report on farm income for Salem County shows production expenses increasing from \$71,687,000 in 2000 to \$85,187,000 in 2003. The largest areas of increase were feed purchased (\$3,999,000 increase), seed purchased (\$2,711,000 increase) and hired farm labor (\$2,346,000 increase). While both farm productivity and gross receipts have shown an increase, the trend of increased costs has continued into the present. (*U.S. Department of Agriculture, Bureau of Economic Analysis*) While faring better than their colleagues in northern New Jersey, farmers in Salem County are facing many of the same pressures that appeared earlier in other parts of the State: encroachment of development, increasing value of land making sale for development attractive, need to identify and implement new markets and marketing strategies, and rising labor costs.

Area wide land price inflation and the encroachment of development have caused residential sales prices to rise in Salem County but at a slower rate than the northern and eastern sections of the State. The *United States Treasury* reports the average Salem County residence sold for \$107,993 in 2000. The average rose to \$129,533 in 2004. Prudential Realty Corporation reports a higher 2004 average price of \$136,990 which is a 17% increase over their 2003 average. (*Prudential Realty website*) 6

Although the figures represent home sales, land values throughout the County are rising at a proportional rate. Population migration from north to south and east to west throughout New Jersey is placing undeveloped land at a premium. The County's transportation corridors and easy commute into Delaware and Philadelphia make it an attractive location for commuters.

While the value of Salem County land is increasing, Salem County farmers face the prospect of a leveling off of the price of farm commodities. The United States Department of Agriculture predicts a 10-year trend of net farm income leveling after the rise of 2003 –2004, while costs are expected to continue to rise. (U.S. Department of Agriculture, Economic Research Service)

Farm viability will be dependent upon maintaining existing markets and identifying and expanding upon new markets. The New Jersey Department of Agriculture has specified the identification and posting of new markets as a specific strategy in its 2006 Economic Development Strategies report. This effort is a necessary outgrowth of the report's finding that due to the State's high land values, property taxes, and labor rates, production costs in New Jersey are higher than in most other areas. With commodity prices based on national production costs, yields and demand, it is less profitable to produce commodity items in New Jersey than elsewhere. (N.J. DOA 2006 Economic Development Strategies)<sup>8</sup>

The New Jersey Department of Agriculture reports:

"One area that offers opportunity for field crops is the emerging prospects for renewable fuels as part of the Green Energy sector. Both corn, for ethanol production, and soybeans, for bio-diesel production, would be in higher demand should plans for an ethanol plant and a bio-diesel production facility come to fruition. Those facilities will need a readily available, local source of these feedstocks for their operations." (N.J. DOA 2006 Economic Development Strategies)

The N.J. Department of Agriculture's efforts to support organic crop production, increase farm income diversification, establish an ethanol plant, commercially produce edible soybeans, and educate growers about agri-tourism opportunities will continue. In addition, the promotion and growth of agri-tourism is clearly on the Department's agenda. The Department stated,

"With New Jersey farmers facing rising costs and stagnant commodity prices, agri-tourism offers an important opportunity to generate additional farm income and keep farms economically viable. Agri-tourism presents opportunities for New Jersey growers seeking to add value to their crops and/or capture more of the market price of their products by directly accessing consumers." (N.J. DOA 2006 Economic Development Strategies)

Rising labor costs are a factor in farm profitability throughout the area. *National Agriculture Statistics Service* (NASS) reports that in 1997 hired labor costs in New Jersey were \$148,621,000 and in 2002 was \$186,913,000 representing 27.8% and 28.9% of total farm costs. Nationally farm labor costs increased 5.5% from 2003 to 2004. County statistics are not available for this time period. (2002 Census of Agriculture)

The State minimum wage was raised to \$6.15 per hour in October 2005. This was followed by a second increase to \$7.15 and an indexing for inflation effective October 2006. Many farm employers will struggle to cope with the multiple financial effects of these legislated mandates. The minimum wage is frequently used in agriculture as an "indicator wage," the basis to peg other wage rates, year-end bonuses and a host of other non-wage benefits that are part of the employee's remuneration. (*Report of the Agricultural Transition Policy Group*)

As labor costs rise, farmers are increasingly open to expanding mechanization of tasks previously performed by labor. Increased mechanization appears to be a major factor in the NASS finding that in 2004 U.S. farm production expenditures costs rose 24.3% due to tractors and self-propelled farm machinery (*U.S. DOA Newsroom release*)

Agriculture is a major component of Salem County's economic health and social fabric. While over time the economy of the County has grown to encompass other industries, farming has remained the cornerstone upon which the County developed. Salem County's land preservation activities are directed at preserving this sector of the economy and continuing to maintain the County's agricultural landscape and farming lifestyle. The agricultural trends apparent in Salem County are similar to those evident throughout the State, but the County's aggressive farmland preservation efforts and supporting government agencies offer Salem's farmers a solid support structure upon which to base an optimistic view for the County's farming future.

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<sup>&</sup>lt;sup>5</sup> United States Department of Commerce, Bureau of Economic Analysis: Regional Economic Account. http://www.bea.gov/bea/regional.reis/action.cfm. Accessed June 2006.

<sup>&</sup>lt;sup>6</sup> Prudential Realty, New Jersey. 2005 Home Expert Market Report. http://www.prufoxroach.com/aboutus/press\_releases/Prudential\_NJ.pdf. Accessed June 2006

<sup>&</sup>lt;sup>7</sup> United State Department of Agriculture, Economic Research Service. U.S. Agricultural Sector Aggregate Indicators. Published February 2006. http://www.ers.usda.gov/publications/oce061/oce20061e.pdf. Accessed June 2006.

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SALEM COUNTY
STATISTICS FROM THE CENSUS OF AGRICULTURE (5-YEAR CYCLE)

FARMS	2002	1997	1992	1987
NUMBER	753	716	752	697
ACREAGE	96,238	92,890	98,256	95,265
AVERAGE SIZE (ACRES)	128	130	131	137
MEDIAN SIZE (ACRES)	40	46	N	N
AVERAGE ESTIMATED MARKET VALUE PER				
FARM (\$)				
LAND & BUILDINGS	593,464	536,956	384,915	261,416
MACHINERY & EQUIPMENT	78,473	65,676	51,275	43,633
CROPLAND (ACRES)				
TOTAL	77,228	75,066	81,004	78,751
HARVESTED	66,815	65,803	68,733	63,080
IRRIGATED	19,147	18,227	13,954	17,251
MARKET VALUE AGRICULTURAL PRODUCTS SOLD				
COUNTY TOTAL VALUE (\$1,000)	72,522	68,492	54,435	49,923
AVERAGE PER FARM (\$)	96,310	95,659	72,387	71,626
NET CASH SALES RETURN PER FARM				
AVERAGE (\$)	12,009	21,033	14,811	13,948
LIVESTOCK (INVENTORY)				
CATTLE & CALVES	8,102	10,689	12,048	12,738
BEEF COWS	1,488	1,725	1,865	1,470
MILK COWS	2,631	3,865	4,472	5,517
HOGS & PIGS	348	1,600	3,125	3,870
SHEEP & LAMBS	1,369	943	1,071	783
LAYERS (20 WEEKS OR OLDER)	D	D	D	569,999
BROILER & CHICKEN (SOLD)	118	342	0	D
COMMODITY HARVESTED (ACRES)				
CORN, GRAIN OR SEED	14,374	11,791	10,457	9,755
CORN, SILAGE OR GREENCHOP	2,849	4,736	3,497	4,149
SORGHUM, GRAIN OR SEED	251	N	N	N
WHEAT	7,339	N	N	N
BARLEY	964	N	N	N
OATS	13	N	N	N
RICE	N	N	N	N
SUNFLOWER SEED	N	N	N	N
COTTON	N	N	N	N
TOBACCO	N	N	N	N
SOYBEANS	18,240	21,976	29,388	21,662

SALEM COUNTY STATISTICS FROM THE CENSUS OF AGRICULTURE (5-YEAR CYCLE) COMMODITY

COMMODITY HARVESTED (ACRES)	2002	1997	1992	1987
DRY EDIBLE BEANS, EXCL. LIMAS	N	N	N	N
POTATOES, EXCL. SWEET POTATOES	1,690	N	N	N
SUGARBEETS FOR SUGAR	N	N	N	N
SUGARCANE FOR SUGAR	N	N	N	N
PEANUTS FOR NUTS	N	N	N	N
FORAGE LAND (ALFALFA, HAY,) 1/	11,388	8,847	9,570	8,774
VEGETABLES FOR SALE				
NUMBER OF FARMS	104	104	136	164
ACREAGE	14,555	11,455	11,456	13,730
ORCHARDS				
NUMBER OF FARMS	12	12	8	7
ACREAGE	D	D	D	D
PRIMARY OPERATORS OCCUPATION (NUMBER)				
FARMING	404	308	358	352
NON-FARMING	349	408	394	345
GOVERNMENT PAYMENT PROGRAM PARTICIPATION				
NUMBER OF FARMS	99	73	77	113
PERCENT OF TOTAL	13.15%	10.2%	10.2%	16.2%
TOTAL PAYMENTS RECEIVED (\$1,000)	699	267	344	863
AVERAGE PAYMENT RECEIVED PER FARM (\$)	7,056	3,660	4,467	7,634

<sup>1/</sup> AREA COUNTED ONLY ONCE (ALL HAY, ALFALFA, SMALL GRAIN, GRASS SILAGE, GREENCHOP.) N- REPRESENTS ZERO

## SOURCE: USDA, NASS, 2002 CENSUS OF AGRICULTURE

2002 & 1997 data are from the 2002 Census of Agriculture 1992 & 1987 data are from the 1997 Census of Agriculture

O-REPRESENTS AN INSIGNIFICANT AMOUNT

D- WITHHELD TO AVOID DISCLOSING DATA FOR INDIVIDUAL FARMS.

Z- LESS THAN HALF OF THE UNIT SHOWN